AMENDMENTS TO THE CLAIMS

1. (Original) A combustion method for NO_x reduction by controlling temperature of combustion gas derived from a burner, comprising in combination the steps of: suppressing combustion gas temperature by heat absorbers; suppressing combustion gas temperature by recirculating burning-completed gas to a combustion-gas burning reaction zone; and suppressing combustion gas temperature by adding water or steam to combustion-use air of the burner, whereby the combustion gas temperature is suppressed.

2.(Original) A combustion method for NO_x reduction as claimed in claim 1, further comprising in combination the step of suppressing combustion gas temperature by burning the burner as a fully-premixing type burner at a high excess air ratio.

3.(Original) A combustion apparatus for NO_x reduction by controlling temperature of combustion gas derived from a burner, comprising: first suppression means for suppressing combustion gas temperature by heat absorbers provided in a burning reaction zone; second suppression means for suppressing combustion gas temperature by recirculating burning-completed gas to the combustion-gas burning reaction zone; and third suppression means for suppressing combustion gas temperature by adding water or steam to combustion-use air of the burner.

4. (Original) A combustion apparatus for NO_x reduction as claimed in claim 3, further comprising, in combination, fourth suppression means for suppressing combustion gas temperature by burning the burner as a fully-premixing type burner at a high excess air ratio.

5. (New) The method of claim 1 comprising the additional step of providing a blower supplying combustion-use air to the burner and wherein said step of suppressing combustion gas temperature by adding water or steam to combustion-use air of the burner comprises the step of adding water or steam upstream of the blower.

6. (New) The method of claim 2 including the additional step of maintaining the high excess air ratio at a substantially constant level independent of an outside air temperature.

7. (New) The method of claim 1 wherein said step of adding water or steam to combustion-use air of the burner comprises the step of adding water or steam to recirculating burning-completed gas.

8. (New) The method of claim 1 including the additional steps of providing a blower blowing combustion use-air and recirculating

burning-completed gas into a burner wherein said step of adding water or steam to combustion-use air of the burner comprises the step of adding water or steam to recirculating burning-completed gas upstream of the blower.

9. (New) The method of claim 1 including in combination the step of suppressing combustion gas temperature by burning the burner as a fully-premixing type burner at high excess air ratio whereby NOx emissions are maintained at a level of 10 ppm or less, at 0% O_2 in an exhaust gas, dry basis.

10. (New) The method of claim 1 whereby NOx emissions are maintained at a level of 10 ppm or less, at 0% O_2 in an exhaust gas, dry basis.

11. (New) A combustion apparatus for NO_x reduction by controlling temperature of combustion gas derived from a burner having a burning reaction zone and an exhaust gas passage, comprising: heat absorbers provided in the burning reaction zone for suppressing combustion gas temperature; an exhaust gas recirculation passage connected to the exhaust gas passage for recirculating burning-completed gas to an air supply passage, and a line feeding water or steam to the exhaust gas recirculation passage upstream of the burner.

12. (New) The combustion apparatus of claim 11 including a blower providing combustion-use air and recirculating burning-completed gas to the burning reaction zone and wherein said line feeds water or steam into the exhaust gas recirculation passage upstream of said blower.

13. (New) A combustion method for NO_x reduction by controlling temperature of combustion gas derived from a burner, comprising the steps of:

suppressing combustion gas temperature by heat absorbers;

recirculating burning-completed gas to a combustion-gas burning reaction zone;

adding water or steam to combustion-use air of the burner; and

burning the burner as a fully-premixing type burner at high excess air ratio;

whereby NOx emissions are maintained at a level of 10 ppm or less, at 0% O_2 in an exhaust gas, dry basis.

14. (New) A combustion method comprising the steps of:

burning fuel to produce gasses and exhaust gasses; and

maintaining a NOx level in the exhaust gasses at no more that 10 ppm or less, at 0% O_2, dry basis;

wherein said step of maintaining a NOx level in the combustion gasses at no more that 10 ppm comprises the steps of:

suppressing combustion gas temperature by heat absorbers;

recirculating burning-completed gas to a combustion-gas burning reaction zone; and

adding water or steam to combustion-use air of the burner.

15. (New) The method of claim 14 wherein said step of maintaining a NOx level in the combustion gasses at no more that 10 ppm includes the additional step of burning the burner as a fully-premixing type burner at high excess air ratio.

16. (New) The method of claim 14 wherein said step of adding water or steam to combustion-use air of the burner comprises the steps of adding water or steam to recirculating burning-completed gas and mixing the burning-completed gas with the combustion-use air.

AMENDMENTS TO THE DRAWINGS

Attached hereto is(are) two (2) sheet(s) of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected formal drawings incorporate the following drawing changes:

Descriptive legends have been added to elements of Figures 6 and 11.

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.